

Preparing graduates for the professions using scenario-based learning

Edited by Edward Peter Errington

*P^{ost}
ressed
brisbane*

©2010 Edward Peter Errington (Selection and editorial material). Copyright of the original chapters remains the property of the authors. All rights reserved. Except for the quotation of short passages for the purposes of criticism and review, no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the Copyright Authority Ltd. or the publisher.

A Cataloguing-in-Publication entry for this book is pending and available from the National Library of Australia

ISBN: 978-1-921214-66-0 (pbk)

ISBN: 978-1-921214-67-7 (web)

Post Pressed acknowledges the First Peoples of the Countries that are now called Australia. Post Pressed is committed to respect and support Indigenous Sovereignty through the publication of Indigenous Knowledge.

This book is proudly published and produced in Australia.

Cover design and typesetting Jon Swabey

Published by Post Pressed
38 Suncroft St Mt Gravatt Qld 4122
www.postpressed.com.au

Printed by Clark and Mackay
PO Box 165 Salisbury Qld 4107

Contents

List of Contributors	7
Foreword	13
Acknowledgements	15
Introduction.....	17

Part One

Employability, professional knowledge and scenario-based learning

1. Creating future-proof graduates using scenario-based learning	27
<i>Anne Hill, Celia Popovic, Jenny Eland, Ruth Lawton and Nick Morton</i>	
2. Using scenario-based learning to promote situated learning and develop professional knowledge	39
<i>Som Naidu</i>	
3. Getting There: Choosing scenarios to meet specific professional needs.....	51
<i>Edward Peter Errington</i>	

Part Two

Preparing graduates using problem-based scenarios

4. Problem-based scenarios for a professional future	65
<i>Janine Henderson</i>	
5. Scenario based disaster health education: "war stories" as vicarious experience.	75
<i>Peter Aitken</i>	
6. Enhancing employability through the use of real-life scenarios in digital media design education	85
<i>Katja Fleischmann and Ryan Daniel</i>	
7. "Schooling for Hard Knocks": Using Scenario-Based Learning (SBL) for Behaviour Management Skills in Pre-Service Teacher Education... ..	97
<i>Raoul Adam</i>	
8. Understanding experience: The collaborative journey using scenario-based learning	111
<i>Eula Miller and Gayatri Nambiar-Greenwood</i>	
9. Using scenario-based learning to teach clinical diagnostics	121
<i>Marie L. Caltabiano</i>	
10. 'It happened just like we talked about': Using scenarios to develop professional identity in pre-service teachers	133
<i>Ruth Hickey and Pauline Taylor</i>	

11. Webfolio – ‘Real-life’ scenarios in an online learning environment.....	147
<i>Reesa Sorin</i>	
12. Using scenarios to train peer mentors online	159
<i>Jenny Worsley and Pauline Taylor</i>	

Part Three

Preparing graduates using issues-based scenarios

13. Using real-life scenarios in law to prepare graduates for professional work practices	169
<i>Eric Holm</i>	
14. Scenario-based Learning: An effective transformational tool for cultural diversity.....	177
<i>Lynette Ireland</i>	
15. The Use of Issues-Based Scenarios to Promote Authentic Learning and Assessment in Higher Education Contexts.....	189
<i>Judi Baron and Ann Davenport</i>	
16. What's in a relationship? Exploring cultural assumptions from an international perspective.....	199
<i>Rowena Errington</i>	
17. Social Work Ethics in Scenario Based Learning	211
<i>Amanda Nickson</i>	

Part Four

Preparing graduates using speculative-based scenarios

18. The Human-Animal Zoo: Exploring enclosure, species and space	223
<i>Mary Murray</i>	
19. Questioning good practice: Using speculative scenarios to develop knowledge of teacher thinking	235
<i>Andrea Allard and Ninetta Santuro</i>	
20. Preparing graduates for work in mental health adopting a scenario-based approach	247
<i>Regina Pernice</i>	
21. Living Forever: Exploring mortality and immortality with scenario-based learning	257
<i>Mary Murray</i>	

List of Contributors

Raoul J. Adam
Lecturer: School of Education
James Cook University
Cairns, Queensland
AUSTRALIA
raoul.adam@jcu.edu.au

Dr Peter Aitken
Adjunct Associate Professor
Anton Breinl Centre for Tropical Health and Medicine
School of Medicine and Dentistry
James Cook University
Townsville, Queensland
AUSTRALIA
peter.aitken1@jcu.edu.au

Dr Andrea Allard
Associate Head, Teaching & Learning
School of Education
Deakin University
Burwood, Victoria
AUSTRALIA
andrea.allard@deakin.edu.au

Judi Baron
Online Educational Coordinator
Coordinator Graduate Certificate in Online Learning (HE)
Centre for Learning and Professional Development
University of Adelaide
Adelaide
SOUTH AUSTRALIA
judi.baron@adelaide.edu.au

Dr Marie L. Caltabiano
Senior Lecturer: Psychology
James Cook University
Cairns, Queensland
AUSTRALIA
marie.caltabiano@jcu.edu.au

Professor Ryan Daniel
Head, School of Creative Arts
James Cook University
Townsville, Queensland
AUSTRALIA
ryan.daniel@jcu.edu.au

Ann Davenport
[Formerly] Project Manager: Online Situational Learning Project
Centre for Learning and Professional Development
University of Adelaide
Adelaide, SA
AUSTRALIA
ann.davenport@adelaide.edu.au

Jenny Eland
Tutor for Educational Development
Birmingham City University
Birmingham
UNITED KINGDOM
Jenny.Eland@bcu.ac.uk

Dr Edward Peter Errington
Academic Development Adviser
Teaching & Learning Development
James Cook University
Townsville, Queensland
AUSTRALIA
ed.errington@jcu.edu.au

Rowena Errington
ESL/EAP Educator
English Language Centre
James Cook University
Townsville, Queensland
AUSTRALIA
rowena.errington@bigpond.com

Katja Fleischmann
Lecturer: School of Creative Arts
James Cook University
Townsville, Queensland
AUSTRALIA
katja.fleischmann@jcu.edu.au

Dr. Janine Henderson
Director of Problem-based Learning
Hull York Medical School
University of York
York
UNITED KINGDOM
Janine.Henderson@hyms.ac.uk

Dr Ruth Hickey
Senior Lecturer: School of Education
James Cook University
Cairns, Queensland
AUSTRALIA
ruth.hickey@jcu.edu.au

Professor Anne Hill
Senior Learning & Teaching Fellow
Birmingham City University
Birmingham
UNITED KINGDOM
Anne.Hill@bcu.ac.uk

Eric Holm
Lecturer in Commercial Law
School of Business
University of Ballarat
Ballarat, Victoria
AUSTRALIA
e.holm@ballarat.edu.au

Lynette Ireland
Lecturer: School of Indigenous Australian Studies
James Cook University
Townsville, Queensland
AUSTRALIA
lynette.ireland@jcu.edu.au

Ruth Lawton
University Learning & Teaching Fellow for Employability
Birmingham City University
Birmingham
UNITED KINGDOM
Ruth.Lawton@bcu.ac.uk

Eula Miller
Senior Lecturer: Pre-registration Nursing
Faculty of Health, Psychology & Social Care
Department of Professional registration
Manchester Metropolitan University
Manchester
UNITED KINGDOM
E.Miller@mmu.ac.uk

Nick Morton
Director of Undergraduate Studies
Property Construction and Planning
Birmingham City University
Birmingham
UNITED KINGDOM
Nick.Morton@bcu.ac.uk

Dr Mary E. Murray
Senior Lecturer: School of Sociology, Social Policy and Social Work
Massey University
Palmerston North
NEW ZEALAND.
M.Murray@massey.ac.nz

Associate Professor Somaiya Naidu
Director, Teaching & Learning Quality Enhancement and Evaluation Services
Learning and Teaching Services
Charles Sturt University
Bathurst, New South Wales
AUSTRALIA
snaidu@csu.edu.au

Gayatri Nambiar-Greenwood
Senior Lecturer in Adult Nursing,
Division of Professional Registration,
Faculty of Health, Social Care and Education,
Manchester Metropolitan University,
Manchester
UNITED KINGDOM
G.Nambiar-Greenwood@mmu.ac.uk

Amanda Nickson
Lecturer: School of Creative Arts
James Cook University
Townsville, Queensland
AUSTRALIA
amanda.nickson@jcu.edu.au

Dr Regina Pernice
Rehabilitation Coordinator
School of Health Sciences
Massey University
Palmerston North
NEW ZEALAND.
R.E.Pernice@massey.ac.nz

Celia Popovic
Director of Educational Staff Development Unit
Birmingham City University
Birmingham
UNITED KINGDOM
Celia.Popovic@bcu.ac.uk

Dr Ninetta Santoro
Associate Professor & Head of Teacher Education
Charles Sturt University
Bathurst, New South Wales
AUSTRALIA
nsantoro@csu.edu.au

Dr Reesa Sorin
Senior Lecturer
School of Education
James Cook University
Cairns, Queensland
AUSTRALIA
reesa.sorin@jcu.edu.au

Dr Pauline Taylor
Senior Lecturer
School of Education
James Cook University
Cairns, Queensland
AUSTRALIA
pauline.taylor1@jcu.edu.au

Jenny Worsley
Research Worker
School of Education
James Cook University
Cairns, Queensland
AUSTRALIA
jenny.worsley@jcu.edu.au

Foreword

A recent survey of 30,000 students at Deakin University, Australia by Holt and Palmer revealed that 70% of students work part-time (a 50% increase since 1984), with students working on average 14.5 hours per week; a 300% increase since 1984. It is a trend that can be identified in Europe, North America and elsewhere. If these students also committed, say, 38 hours per week to their study they would be working 50+ hours per week!

With such demands upon students time, together with other commitments, how do we engage them, capture their imagination, stimulate their interest . . . prepare them for future employment and the graduate professions?

Preparing graduates for the professions using scenario-based learning by Edward Peter Errington offers teachers and trainers, curriculum designers and educational technologists, teacher educators and academic developers a versatile approach that will bridge the gap between an academic discipline and professional practice. An approach that can be employed irrespective of the discipline in which you work – as illustrated by a varied selection of case studies assembled by the very teachers and trainers, curriculum designers and educational technologists, teacher educators and academic developers that employed them.

Edward Peter Errington has succeeded in bringing together an experienced international team who are prepared to share their knowledge, actual practice and enthusiasm with you. Through a description of Problem-based learning, Issues-based scenarios and Speculative-based scenarios, in areas as diverse as Law and Medicine, Psychology and Education the team illustrates how scenario-based learning has succeeded in preparing graduates for the workplace and the professions. The collection of chapters also illustrates how scenario-based learning can be deployed within a variety of learning contexts – from face to face to online environments and how it can contribute to both skill development and assessment.

There is no panacea that will engage our students, prepare them for future challenges in the workplace and professions. However, this book offers us an insight into how a particular approach can simulate these challenges. I am sure that after reading this book you will also be enthused and, hopefully, prepared to incorporate scenario-based learning into your teaching. It's likely your students, and future employers, will thank you.

Dr Fred Lockwood
Emeritus Professor of Learning and Teaching
Manchester Metropolitan University, UK

January 2010
Townsville, Australia

Acknowledgements

This book has been made possible with the cooperation of Australian contributors based at James Cook University (Cairns & Townsville); Charles Sturt University; University of Ballarat; University of Adelaide; Deakin University. In New Zealand, we have contributors from Massey University, Palmerston North. From the United Kingdom, we have contributors from Birmingham City University; Manchester Metropolitan University; and, Hull York Medical School, (University of York). I thank each and every one for their abiding patience in the face of impending deadlines, demands, and never having enough time in the day – in both northern and southern hemispheres.

Each contributor has proffered special insights into the machinations of scenario-based learning in relation to the ways it might be used to help students prepare for their chosen profession. The authors in this book have generously given their valuable insights into the manner in which they approach SBL with their own cohorts of potential graduates in their own specific disciplines. Collectively contributors represent medicine & chemistry; teacher education; academic development; law; psychology; creative arts; educational development; medical education; business; health, psychology and social care; mental health; social work and policy; and, Indigenous Australian Studies. What a marvellous mixture of human endeavour!

Thanks go to Emeritus Professor Fred Lockwood for his energetic motivation, personal mentoring, and continuing dialogue on the editing process. I would also like to express my gratitude to Dr Nick Sorenyi-Reischl, Director of Teaching and Learning Development at James Cook University for his unwavering support for this project as a catalyst for curriculum reform.

Add to the above my thanks to Dr John Knight of Post Pressed Publishing, Brisbane for his encouragement in publishing this book in less than a promising economic climate for publishing projects.

Thanks yet again to my wife Rowena who acted as a second/third reader helping maintain the quality and consistency of the book within and across chapters.

Dr Edward Peter Errington
Academic Development Adviser
Teaching and Learning Development
James Cook University

Townsville
January 2010

Introduction

Edward Peter Errington

Welcome to this book on preparing graduates for the professions using scenario-based learning. It is compiled at a time when the governments of Australia, the UK and New Zealand, along with employers are prompting higher education institutions to increase the employability prospects of their graduates.

This is a book for those tertiary teachers on the front line who are doing their best to help students bridge perceived gaps between discipline areas and professional practices and so optimise prospects of employability. It is suggested that scenario-based learning (SBL) can provide one useful way of meeting the demand for relevant graduate preparation. It will also be of use to curriculum specialists, work-based-learning advisers, teacher educators, coordinators of academic development programs, and all others in the front line. Its main purpose is to report on ways that scenario-based learning in particular can be planned, delivered, evaluated, and reflected upon in a systematic way to achieve desired learning intentions.

I begin by discussing why this book is important at this juncture in the preparation of graduates for the professions. I then render a rationale for using scenario-based learning as the medium for enhancing this readiness for the world of work. This is followed by an explanation of the four-part structure of the book where the first part renders some overarching contexts to the adoption of SBL. Parts two, three, and four focus on three popular kinds of scenarios, namely: problem-based; issues-based; and, speculative-based. Collectively, these three approaches account for the majority of scenarios used in the preparation of professionals (Errington 2003; 2005; 2009).

I begin with a brief discussion about the rationale of this book. Why use scenario-based learning to enhance the development of graduates in higher education settings?

Background

This is the second anthology of scenario-based learning as used in higher education, but the first of its kind to address the use of SBL in the preparation of graduates.

An expanding student population, widening participation and the subsequent pressure on work placement opportunities where students, as would-be professionals can articulate and present their experience has resulted in a re-evaluation of what is possible on professional training/development courses. Added to these pressures, is the respective governments' insistence on institutions helping students bridge perceived gaps between subject theory and professional practice.

Contributors to this anthology argue that simulated or 'real-world' scenarios, delivered as "essential slices of (professional) reality", (Stewart 2003:) can help build bridges of understanding between university disciplines and the world of work no matter what the subject area. Real-world scenarios can be embedded in most

curriculum areas when based on notions of 'authentic learning'. That is, learning *in situ*, or situated learning which reflects, in a true-to-life way the actual norms, cultural knowledge, roles, responsibilities and language of the chosen workplace.

So – what is scenario-based learning?

The term 'scenario-based learning' refers to any educational approach that involves the use of, or dependence upon, scenarios to bring about desired learning intentions. Scenarios may constitute a given set of circumstances, a description of human behaviour, an outline of events, a story of human endeavour, an incident within a professional setting, or human dilemma, (Errington 2003). The common thread is in using scenarios to achieve specific educational purposes. A review of the literature reveals a plethora of names for scenario-based approaches: In various contexts, SBL may be labelled: 'critical incidents' (Tripp, 1993); 'scripted role-play', (Brislin & Yoshida, 1994); 'triggers' (Wilkie, 2000); 'goal-based learning' (Schank, 1992); and the catch-all term 'simulation' (eg. Ghore, 2001). These names also refer to different kinds of scenario usage. Central to all, however, is the notion that the scenario or situation carries the learning experience.

The continuing realisation that scenario-based learning is important in the preparation of tomorrow's graduates has prompted the construction of this edited work.

Three different kinds of scenarios used to prepare graduates for the professions

Scenario-based learning extends beyond a one one-size-fits-all vision: A survey of the literature suggests there are three main kinds of scenarios used in higher education settings. The first is problem-based - created to help students integrate their theoretical understandings with practical knowledge in demanding ways. Decision-making and critical analyses are significant components of a problem-based process.

Issues-based scenarios provide a second option: These are used to explore concerns that underpin, inform or influence the area of study/practice. Students have the opportunity to take a stand on an issue, and importantly understand more clearly the impact of human interests on (professional) decision-making. Finally, speculative-based scenarios allow students to contemplate a range of past, present, and future factors that influence and inform their discipline/profession.

Together these three options incorporate acquired disciplinary skills and account for the majority of scenario offerings in tertiary education, (Errington 2003; 2005; 2009). Hence their choice as focal points in Parts Two (problem-based scenarios), Three (issues-based scenarios), and Four (speculative-based scenarios) of this book.

Aims of this book

The overall intention of this book is to provide tertiary teachers, curriculum designers, educational technologists, teacher educators and academic

development advisers with clear informed theories, deliverable strategies and reflective processes to help prepare students for the professions through an active ('minds-on') engagement in scenario-based learning processes.

Contributors to Part One of the book examine the relationship between scenario-based learning and preparation for the professions, leading to a discussion of the main kinds of scenario options available to tertiary educators.

Those authors contributing to Part Two, Three and Four of the book provide practical examples of scenario-based learning within a broad range of professional preparation settings. To provide a sense of coherence to the work across chapters, each contributor was invited to address seven questions. Each author decided how much emphasis to place on respective responses to each question.

Here are the questions:

- What were your educational purposes for using SBL?
- What is the context in which the learning takes place?
- Which scenario(s) do you use?
- How do you deliver the scenario?
- How do you evaluate the scenario?
- What do students make of the scenario experience?
- What advice can you give to readers wishing to engage their own students in similar ways?

Collectively, responses to the above questions may provide insights into the application of SBL for preparing graduates for the professions - founded on clear, explicit educational philosophies and identifiable, achievable learning purposes.

How the book is organised and its contents

This book is divided into four parts that deal with some overarching SBL contexts, followed by problem-based scenario examples; issues-based scenario examples; and, speculative-based scenario examples respectively. Having looked at some contextual 'drivers' of SBL, we have details of individual approaches to SBL practice, organised according to one of three main types of SBL mentioned above. Individual approaches encompass learning purposes in respect of graduate preparation, and the kinds of knowledge construction students engage in. This is followed by a brief description of the chapters in the book that exemplify the individual author's approach.

Part I: Employability, professional knowledge and scenario-based learning

Part One of the book begins with an overarching look at the push for graduate 'employability' by government and employers in the UK and the subsequent gathering of national resources (banks of simulated experiences) to augment the pressures on work-based placements. In particular, the authors report on the *Creating Future-proof Graduates Project* at Birmingham City University. This parallels similar projects carried out in Australia (e.g. 'Project EnROLE').

Preparing graduates for the professions using scenario-based learning

Scenario-based learning (SBL) emerges with promise as one stratagem that might be used to optimise work experience and prepare graduates for the professions by providing rich opportunities for students, as would-be professionals to gain situated learning and allied contextual knowledge. Particular attention is paid to the roles of the educator in SBL processes. SBL does not achieve intended learning outcomes of its own volition; it requires careful, systematic guidance.

The final section of Part One focuses on the kinds of scenario-based options available to tertiary educators. Emphasis is placed on the ways that specific learning intentions can be achieved (and exceeded) by the judicious choice of scenario options and allied strategies.

In Chapter 1, *Creating future-proof graduates using scenario-based learning*, Anne Hill, Celia Popovic, Jenny Eland, Ruth Lawton and Nick Morton outline pressures put on higher education institutions in the UK to produce employable graduates. They argue that universities have a key role to play in preparing their students for the needs of the workplace no matter what the subject area. This chapter focuses on the theoretical underpinnings, and justifications for, the development of skills and experience using 'real world' scenarios which can be embedded in any curriculum area. Examination is made of the claim that scenarios may be used to produce 'future-proof' graduates through critical reflective practice.

In Chapter 2, *Using scenario-based learning to promote situated learning and develop professional knowledge*, Som Naidu promotes scenario-based learning as a model of situated learning, noting how contextual learning can be put into practice when preparing graduates for the professions. He argues that within the scenario learning process, the role of the teacher is that of an "engaged architect and choreographer of the learner's learning experience", rather than the 'guide on the side'. He notes that SBL resembles professional practice and as such it offers would-be professionals a (virtual) apprenticeship for the workforce.

In Chapter 3, *Getting There: Choosing scenarios to meet specific professional needs*, Edward Peter Errington outlines the scenario-based learning process before discussing the basis on which scenario choices might be made. He then goes on to outline four of the most popular approaches to scenario-based learning and how each can deliver specific kinds of preparation for graduates.

In the sections which follow, skills-based scenarios are subsumed within the problem-based, issues-based and speculative-based scenario approaches. Fundamental discipline-based skills are a prerequisite for the success of the other three approaches.

Having outlined the relationships between SBL and employability, and identified different scenario approaches, there now follows some specific examples of their practical use, beginning with problem-based scenarios.

Part II: Preparing graduates using problem-based scenarios

In problem-based approaches, students pursue specific open-ended problems where they are required to identify what they know already about the problem; draw upon working knowledge; locate that knowledge in their discipline area; construct knowledge en-route; and, apply these gleanings to a series of challenges; react appropriately to problems as they arise; and, arrive at considered solutions based on reasons that can be justified. The process also incorporates deep level learning via acts of decision-making, critical analyses, gathering and justification of appropriate evidence, and the consideration of alternative solutions (hypotheses) to any pursued problem. Here are our examples:

In Chapter 4, *Problem-based scenarios for a professional future*, Janine Henderson details the use of problem-based scenarios within the context of a modern undergraduate medical curriculum. She describes the use of a "virtual patient" community at the centre of an integrated curriculum and the benefits of using educationally trained clinicians in this area of learning delivery. Here students learn clinical communication skills using specially designed scenarios portrayed by trained actors as simulated patients, focusing on the development of the key professional skills for modern medical practice.

In Chapter 5, *Scenario based disaster health education: "war stories" as vicarious experience*, Peter Aitken observes that the ability to involve mid-career professionals in the 'disaster experience' is impossible logistically and ethically. The solution was to engage them in real life scenarios that illustrate the difficulties faced in disaster response and stimulate discussion and problem solving. Students claim to feel more engaged in interactive sessions than didactic instruction.

In Chapter 6, *Enhancing employability through the use of real-life scenarios in digital media design education*, Katja Fleischmann and Ryan Daniel consider how problem-based scenarios can prepare digital media design students for a successful transition from classroom to the workplace through facilitating an authentic and industry-reflective learning environment. The majority of students indicated a future preference to work on real-world projects and they found the integrated feedback from the industry professional helpful and inspiring.

In Chapter 7, *Schooling for Hard Knocks: Using Scenario-Based Learning (SBL) for Behaviour Management Skills in Pre-Service Teacher Education*, Raoul Adam explains how many beginning teachers fall blindly into the gaps between university theory and school practice. He explores the effective use of scenario-based learning (SBL) as a tool for behaviour management in a pre-service teacher education course, employing a four stage process. He discusses how SBL can provide a bridging strategy between 'top-down' theorising in pre-service teacher education programs and the 'bottom-up' realities of school-based teaching through this four stage process.

In Chapter 8, *Understanding experience: The collaborative journey using scenario-based learning*, Eula Miller and Gayatri Nambiar-Greenwood recount their use of problem-based scenarios with novice mental health nursing students.

Preparing graduates for the professions using scenario-based learning

Scenarios are employed to unravel students' 'live' clinical problems and 'life' issues experienced on their professional journey. The chapter shows how and why scenarios can be used to develop professional identities.

In Chapter 9, *Using scenario-based learning to teach clinical diagnostics*, Marie L. Caltabiano explores scenario-based learning (SBL) techniques within the discipline of Psychology where these are used to situate learning within a specific real-life, problem-based context. She shows how and why SBL is ideally suited to the training of undergraduate students in Clinical and Health Psychology to meet specific learning intentions such as reinforcing area-specific content.

In Chapter 10, *'It happened just like we talked about': Using scenarios to develop professional identity in pre-service teachers*, Ruth Hickey and Pauline Taylor proffer their use of scenarios with pre-service teachers which they base on authentic dilemmas encountered in local schools. These would-be teachers must redefine themselves as learners and neophyte teachers. Scenarios are developed around four dimensions, linked to professional standards and a developmental continua from personal to professional proficiency.

In Chapter 11, *Webfolio – 'Real-life' scenarios in an online learning environment*, Reesa Sorin reveals a process that offers early childhood pre-service teachers the opportunity to work through real life scenarios in online learning communities. It incorporates both real people and virtual web resources. The author concurs that if authentic learning is to occur, every effort must be made to situate it within real life experiences. Participants come to realise there is no single, correct solution to the scenario dilemma; rather they are encouraged to reflect, imagine and develop multiple and often non-traditional solutions.

In Chapter 12, *Using scenarios to train peer mentors online*, Jenny Worsley and Pauline Taylor, narrate how academic staff and student mentor leaders draw on literature related to e-learning, mentoring and Federal reports into teacher education and show how scenarios, based on real-life dilemmas encountered in university study and in professional contexts explore and build authentic learning opportunities for new online students. This approach is particularly important in a context where students can never access face-to-face support and are grappling with two alien environments –university and online learning .

Footnote

We observe that problem-based scenarios are useful in learning situations where students need to understand that 'real-world' knowledge is not fixed; it is an uncomfortable fact the things we take for granted are changing all the time. Opportunities may be afforded for applying knowledge in demanding circumstances to open ended, 'real-world' questions. In a problem-based scenario process, students are not encouraged to focus on singular 'correct' answers (as these may change over time), but rather on the decision-making process itself. In short, the journey is more important than the destination. Even simple decisions will have consequences, and often students report that so-called 'simple' choices often turn out to be more complicated than originally thought. Problem-focussed scenario examples can help potential graduates

encounter and tolerate ambiguity, value uncertainty, be more spontaneous in the light of changing circumstances (Errington 2009), and more open to alternative 'answers' (Miller et al, 2003).

Part III: Preparing graduates using issues-based scenarios

Issues-based approaches provide a framework for exploring issues within a discipline area. Students research particular (human) positions on an issue. Then the various vested (human) interests are identified as role perspectives/positions and role-takers are brought together to debate the issue in a conventional manner e.g. at a 'public' meeting. Alternatively, the engagement may remain at the level of discussion (Errington 2005). Here are our examples of issues-based scenarios:

In Chapter 13, *Using real-life scenarios in law to prepare graduates for professional work practices*, Eric Holm endorses the ways that legal educators use issues-based scenarios as part of teaching law to facilitate student engagement. For the legal educator the design and realism of the scenario can provide an important nexus between the theory and the practice. Students attempt to interpret the practical scenario, identify the relevant legal issues, apply the relevant legal concepts, employ legal reasoning and proffer advice about the issues and the scenario approach.

In Chapter 14, *Scenario-based Learning: An effective transformational tool for cultural diversity*, Lynette Ireland asserts that the main challenge of education for the professions is to create a learning environment which fosters the synergy for learner transformation where 'situated practice' becomes 'transformed practice'. This chapter outlines two scenarios that explore 'cultural diversity' as a common theme. Lynette illustrates how scenario-based learning can prove a powerful and effective methodology for transforming the cultural awareness of potential graduates if used wisely.

In Chapter 15, *The Use of Issues-Based Scenarios to Promote Authentic Learning and Assessment in Higher Education Contexts*, Ann Davenport and Judi Baron affirm how and why issues-based scenarios are an integral feature of online role-play simulations that involve multiple learners and multiple stakeholders with different points of view. The stakeholders interact via online discussion boards and other technologies. The learners adopt a role, immerse themselves in a scenario which include various triggers, undertake research, interact and debate in order for decision-makers to make a final decision. Learners then come out of their roles and debrief and reflect on the learning process. This chapter illustrates how this approach develops both generic and discipline specific graduate attributes and allows for authentic, experiential and constructivist learning, often in a multidisciplinary environment.

In Chapter 16, *'What's in a relationship?' Exploring cultural assumptions from an international perspective*, Rowena Errington relates her use of issues-based scenarios to help international students explore cultural assumptions and

Preparing graduates for the professions using scenario-based learning

relationships in an Australian study setting. She notes how explorations of culture from a discussion-only perspective often result in student perceptions of cultural differences as something rather quaint and novel which, though interesting, do not make any real impact upon the way they view the world and their reactions towards others. A scenario-based approach was chosen to engage students more actively in the ramifications of cultural differences when revealed through the theme of marriage and age differences. Students are deemed better prepared for the professions when they are aware of the personal and social impact of culture on aspects of decision-making in the workplace.

In Chapter 17, *Social Work Ethics in Scenario Based Learning*, Amanda Nickson recounts and analyses the ways by which real life scenarios from social work and community welfare practice are employed to make ethical decision making more relevant to students. She explores three significant issues with her students: the limits of confidentiality; employer's priorities versus a client's needs and priorities; and, child protection and end of life issues. The value of small group discussions, in particular, is explored in detail. Student feedback on this process, teacher reflections and lessons learned as the teacher are also discussed.

Footnote

Issues-based scenarios provide potential graduates with an opportunity to take an informed stand on issues/concerns that inform the subject area and subsequent professional practices. There is an opportunity to defend one's own position and that of others via role-reversal (Errington 1997). It is important that graduates are able to articulate professional issues with confidence and substantive evidence. It is also relevant that they become shrewd observers of human behaviour, noting the work of vested interests throughout all aspects of their chosen profession. To be an effective professional, they need to extend themselves beyond the simple persuasion of heated argument to cool seasoned debate. Much is gained by spending time in 'other people's shoes', that is, developing empathy having experienced the issue from another person's/group's perspective.

Part IV: Preparing graduates using speculative-based scenarios

Speculative-based scenarios engage students in a degree of time travelling when invited to speculate on past, current and/or future (human) events based upon their observations and gathered evidence.

Students speculate upon past, present and future happenings/events. They formulate hypotheses, gather evidence to support/refute their ideas, and present these to the teacher and/or peers for evaluation. '(Guess-) estimations' are made about what might have happened in the past (e.g. archaeological site), or what might happen in the future (e.g. population boom), based upon

evidence on evidence gathered from past and contemporary contexts. Ideas are explored, constructed and represented through role-play, discussion, gaming and/or debate. Here are our examples:

In Chapter 18, *The Human-Animal Zoo: Exploring enclosure, species and space*, Mary Murray considers a scenario she offers students as potential sociologists or veterinary scientists. Students imagine they are extra terrestrial sentient beings from a planet in another galaxy. They consider reasons why they, as sentient beings from outer space, might place members of the human species in zoos. The scenario is used to explore ethical issues surrounding the practice of keeping non-human animals in zoos, offering an imaginative and lively engagement with human, animal, and environmental rights and concerns. It acts as a metaphor for all 'zoos' or places of confinement, and the issues raised by having such places. Students as aspiring sociologists or veterinary scientists are made to think holistically around a collection of speculative problems and issues underpinning the scenario premise.

In Chapter 19, *Questioning good practice: Using speculative scenarios to develop knowledge of teacher thinking*, Andrea Allard and Ninetta Santoro expound on the construction of speculative scenarios based on research data. They reflect on the scenario process used to assist teacher educators elsewhere in thinking through speculative-based scenario designs and allied discussions that can take students beyond superficial understandings of classroom contexts to deeper levels of learning in relation to more inclusive practices.

In Chapter 20, *Preparing graduates for work in mental health adopting a scenario-based approach*, Regina Pernice demonstrates by example how scenarios can be used to help students explore the emotional dimensions found in human settings. She gives examples of her students working in the context of mental health.

In Chapter 21, *Living Forever: Exploring mortality and immortality with scenario-based learning*, Mary Murray presents a scenario to her students which focuses on death and dying. Students are asked to imagine they live at a point in the future where scientists have found a way of enabling humans to live forever. There follows a rigorous examination of Stanislavsky's question: 'What if?' Students examine the implications of this immortality from the perspective of cultural, personal, social, environmental and spiritual factors. Her aim is to have students, as would-be graduates, examine their current lives in terms of optimising its quality, and in recognising the connectivity of all human knowledge.

Footnote

Speculative-based scenarios create a space for students to understand better the inevitability of change and the role of the student, as intending professional, within it. Here lie opportunities for students to think ahead, to make projections based on what they know now, what can be researched, and what can be reasonably assumed. Consequences can be realised, hypotheses tested and the implications of current decisions can be pursued into virtual futures, or

possible pasts. Students realise that what is said and done now has implications for everyone as all knowledge is seen to be related. The past and future can be viewed as experimental, 'problematic' with few fixed points other than evidence that can be gathered now. 'What would happen if?' 'Why did this happen in this way?' These are two perennial questions asked by students as they interrogate their subject area/chosen profession. We might add: 'What might a better future look like? How do we get there?'

The contributors to this collection hope that you will gain from knowing more about how each scenario approach is created, delivered, evaluated, reflected on, and learned from...in respect of graduate development.

References

- Brislin, R. & Yoshida, T. (1994). *Intercultural communication training: An introduction*. Thousand Oaks, CA: Sage.
- Errington, E. (1997) *Role-Play*. HERDSA Green Guide No 21: Higher Education, Research and Development Society of Australasia. Melbourne, Australia: HERDSA Publications.
- Errington, E. (Ed.) (2003) *Developing scenario-based learning: A practical guide for tertiary educators*. Palmerston North, New Zealand: Dunmore Press.
- Errington, E. (2005) *Creating Learning Scenarios: A planning guide for adult educators*. Palmerston North, New Zealand: Coolbooks.
- Errington, E. (2009) Being There: Closing the gap between learners and contextual knowledge using near-world scenarios. *The International Journal of Learning*, 16, (8), 585-594.
- Ghere, D.L. (2001). Recent world crises simulations. *Teaching History*, June 2001, Issue 103, pp.22-26.
- Miller, E., Smalles, S., Stark, S., Street, C. & Watson, K. (2003). Craving (un)certainty: Using SBL for teaching diversity in health care contexts. In E.Errington (Ed.) *Developing scenario-based learning: A practical guide for tertiary educators*. Palmerston North, New Zealand: Dunmore Press.
- Schank, R.C. (1992). *Goal-based scenarios*. Technical Report 36, Evanston, IL: Northwestern University.
- Stewart, T.M. (2003). Essential slices of reality: Constructing problem-based scenarios that work. In E.Errington (Ed.) *Developing scenario-based learning: A practical guide for tertiary educators*. Palmerston North, New Zealand: Dunmore Press.
- Tripp, D. (1993). *Critical incidents in teaching*. London: Routledge.
- Wilkie, K. (2000). The nature of PBL. In S. Glen & K. Wilkie (Eds) *PBL in Nursing: A new model for a new context*. London: Macmillan Press.
- Wills, S., Rosser, E., Devonshire, E., Leigh, E., Russell, C. & Shepherd, J. (2009) *Project EnROLE: Encouraging role-based online learning environments*. Australia: University of Wollongong & Partners.